

Report No.: 1

Test Time: 12.12.2019 20:09

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x24LED 0.35A 37W 5000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.165 A

Power: 35.75 W

Power Factor: 0.974

Photometric Results

CIE Class: Direct

Measurement Flux: 4180.8 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 4180.8 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.9, 160.2, 148.7, 148.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 77.9, 78.8, 75.8, 75.9

Luminaire Efficacy Rating (LER): 117.00

Central Intensity: 2173.1 cd

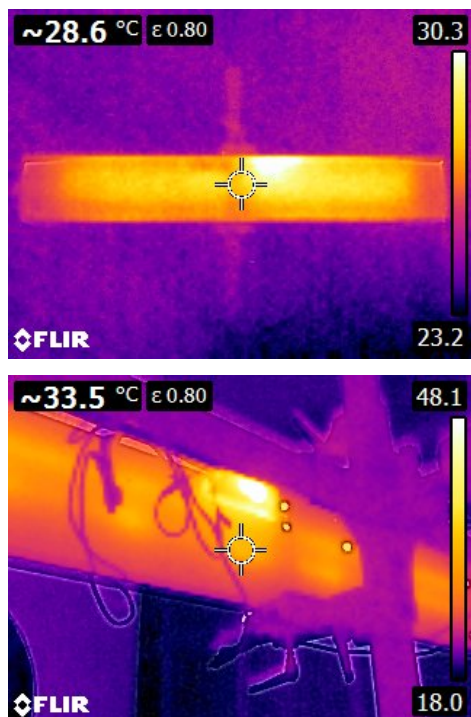
Max. Intensity: 2173.63 cd

Pos of Max. Intensity: H180 V1

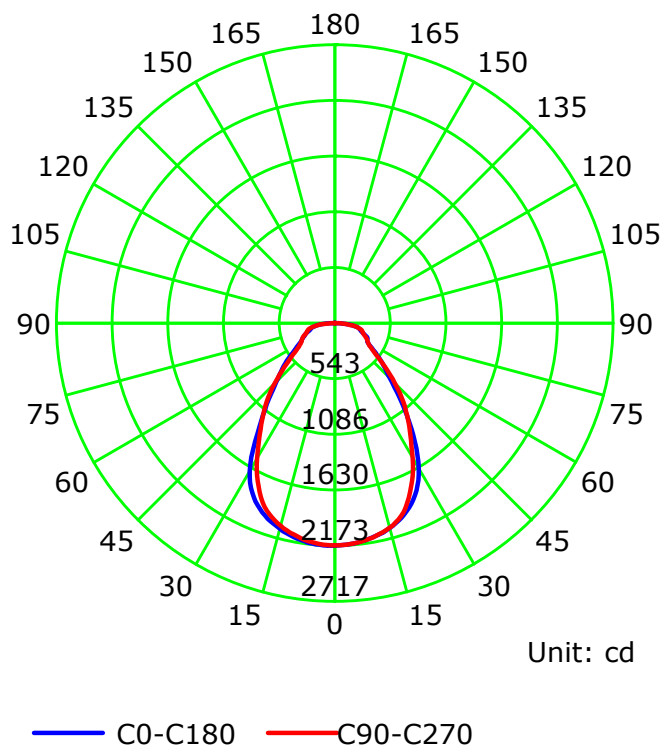
S/MH(C0/C180): 1.15

S/MH(C90/C270): 1.09

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

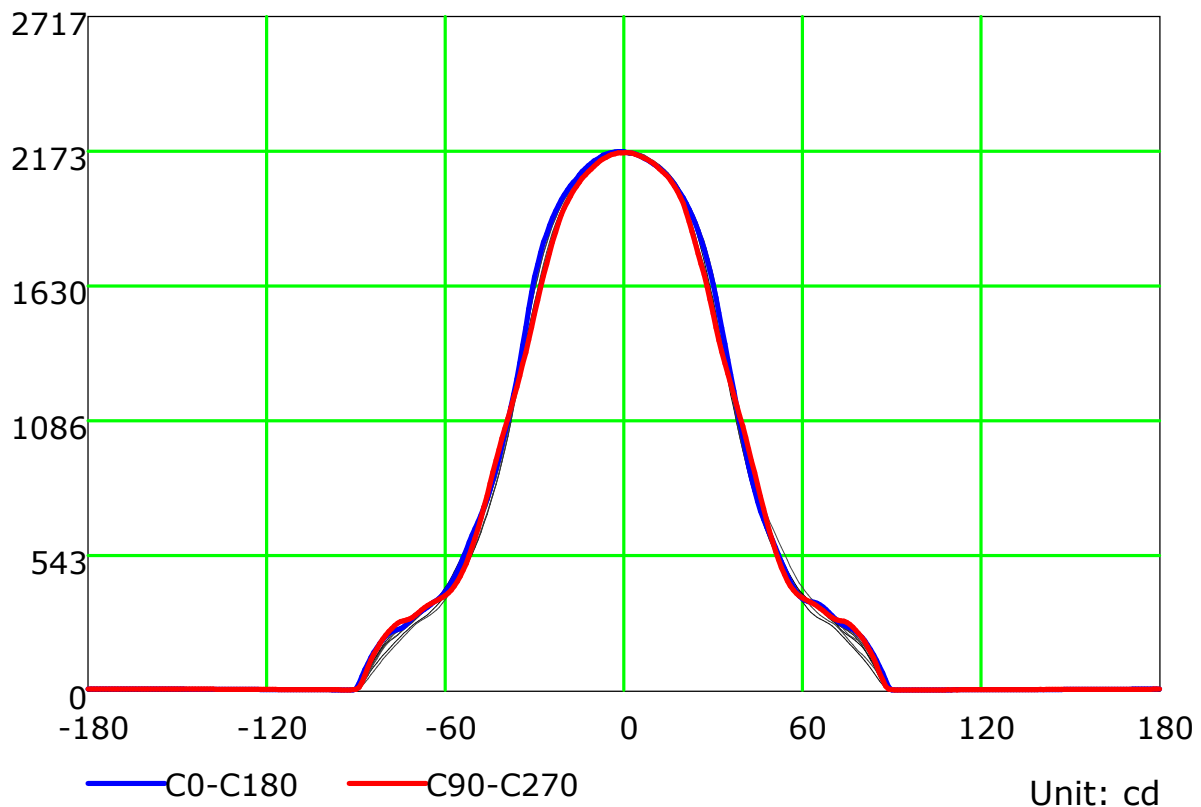
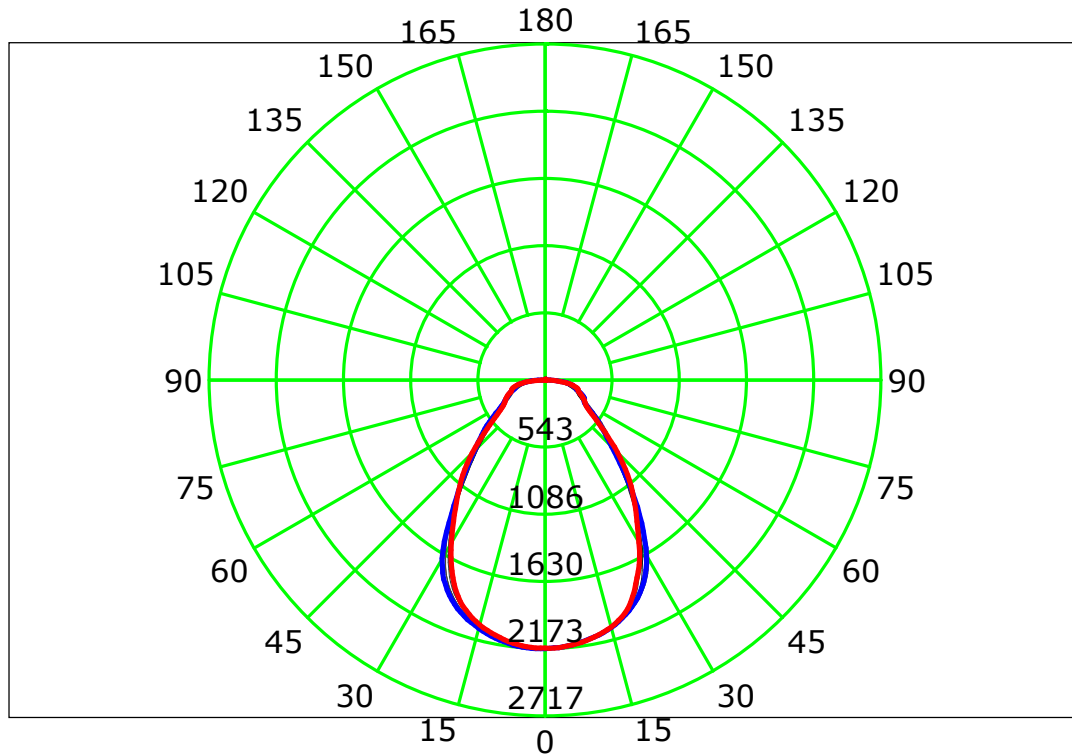
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

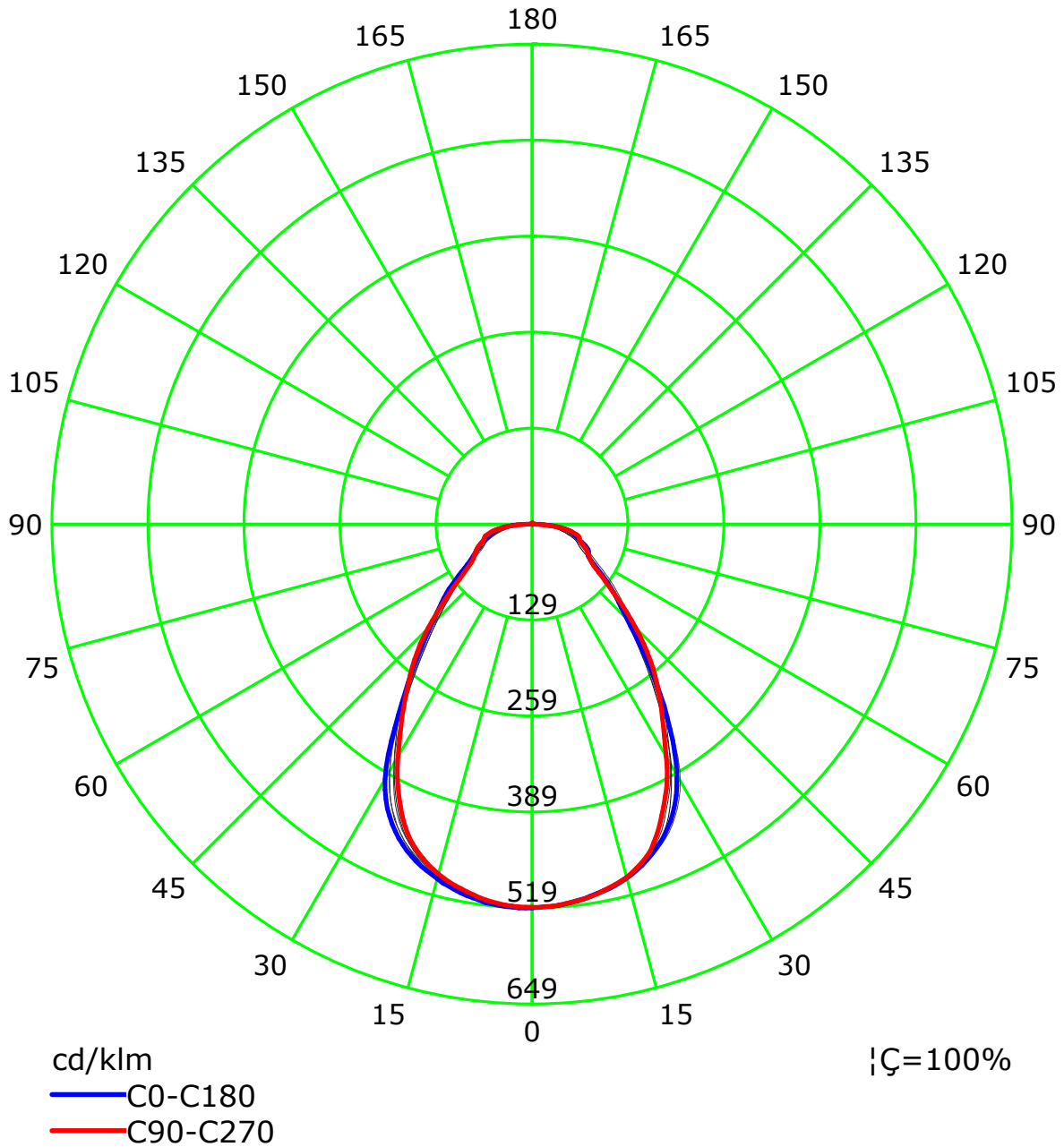
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



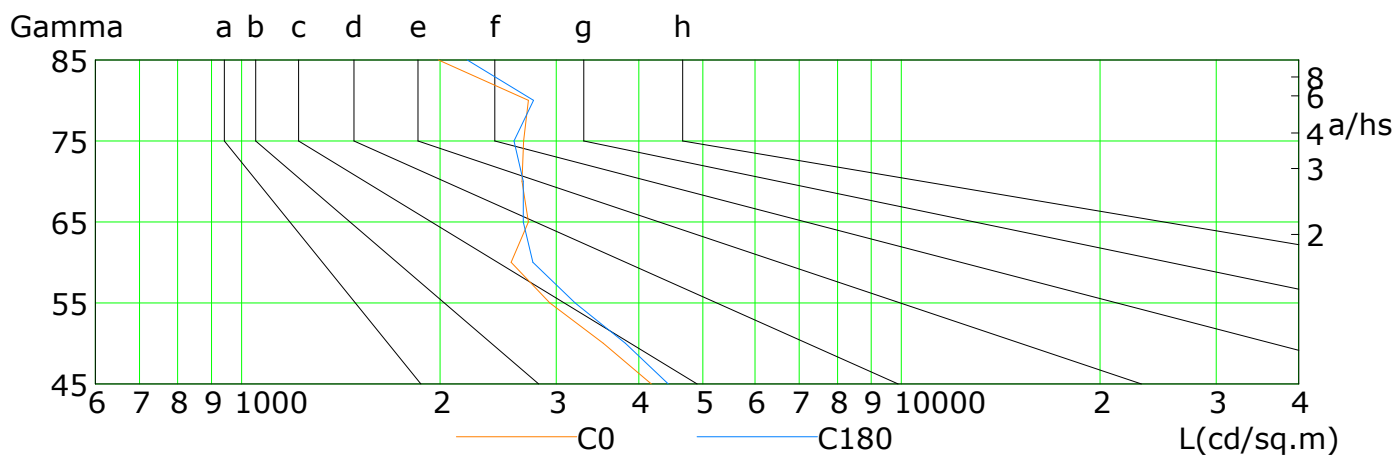
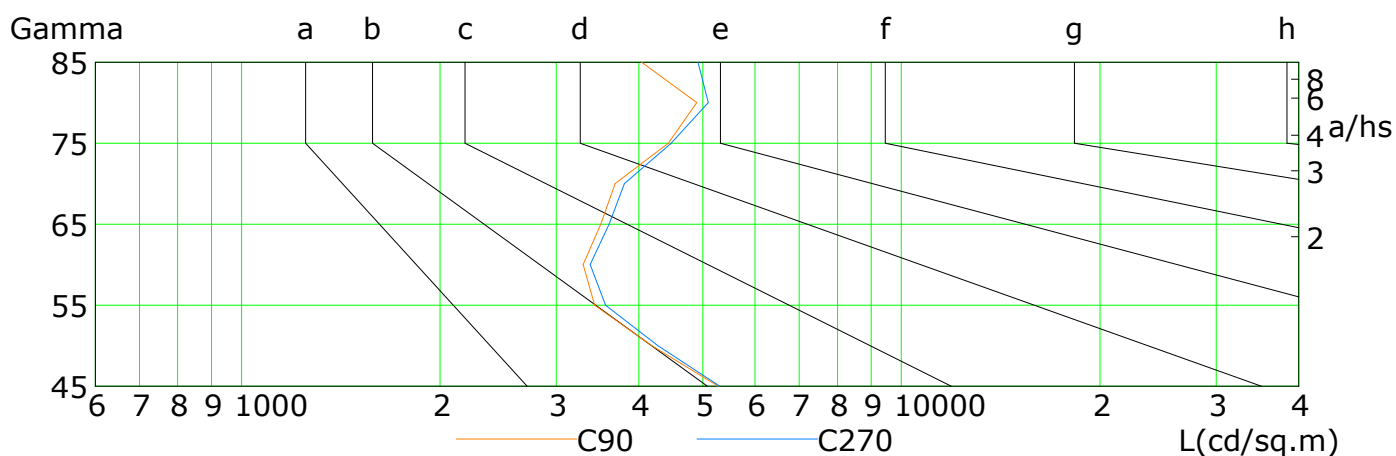
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

a b c d e f g h

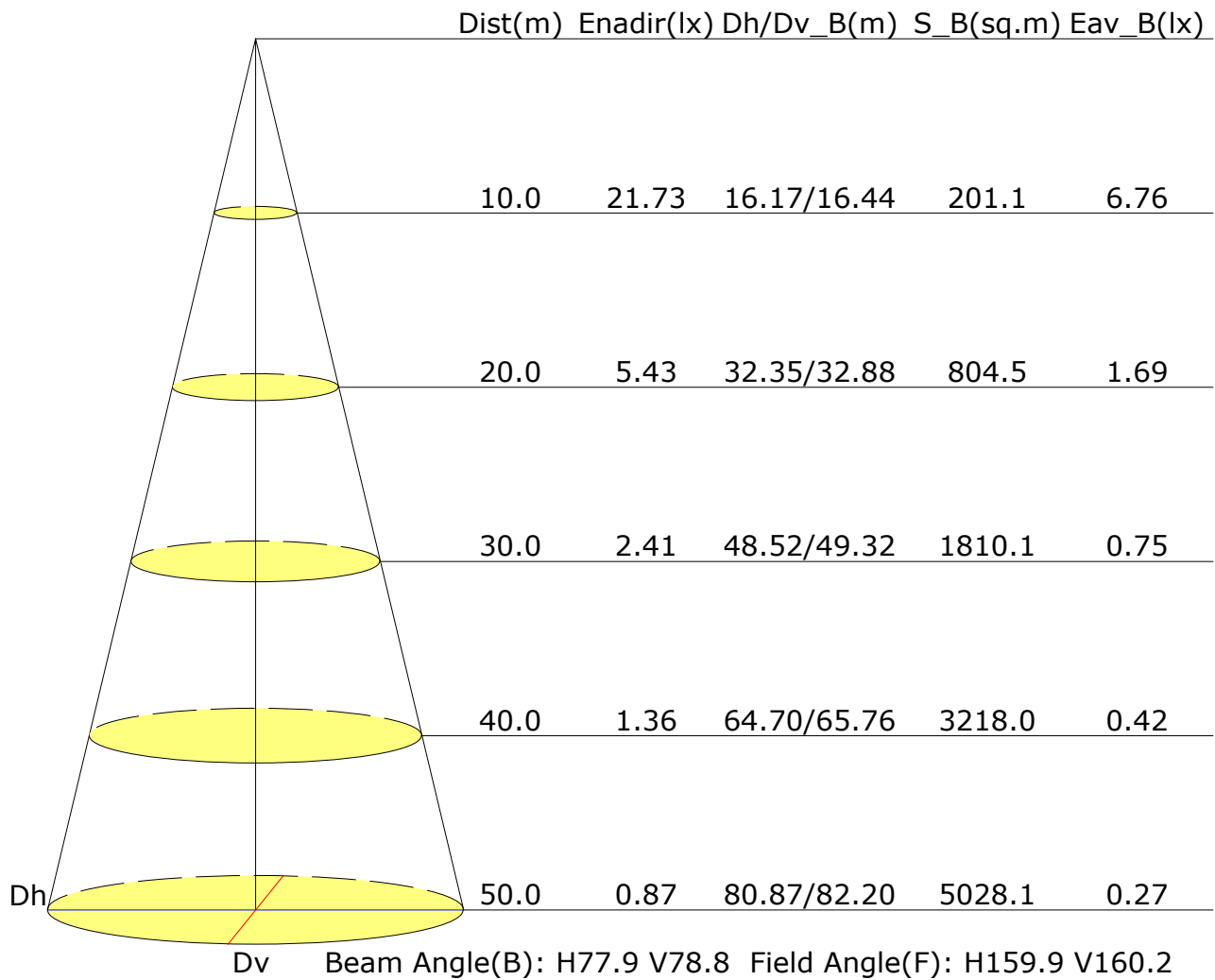


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4177	3533	2934	2562	2722	2661	2676	2720	1987
C90	5274	4181	3427	3294	3500	3683	4431	4898	4041
C180	4433	3818	3203	2765	2673	2673	2588	2771	2198
C270	5308	4275	3561	3377	3604	3803	4479	5099	4920

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Illuminance at a Distance



UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	15.5	16.8	15.8	17.0	17.3	15.9	17.2	16.2	17.4	17.7
3H	17.0	18.1	17.3	18.4	18.7	17.5	18.7	17.9	18.9	19.2
4H	17.7	18.8	18.1	19.1	19.4	18.5	19.6	18.9	19.9	20.2
6H	18.5	19.5	18.9	19.8	20.1	19.5	20.5	19.9	20.9	21.2
8H	18.8	19.8	19.2	20.1	20.4	20.0	20.9	20.3	21.3	21.6
12H	19.0	19.9	19.4	20.3	20.6	20.3	21.2	20.7	21.5	21.9
X=4H Y=2H	16.0	17.1	16.4	17.4	17.7	16.3	17.4	16.7	17.7	18.0
3H	17.7	18.6	18.1	19.0	19.3	18.2	19.1	18.6	19.4	19.8
4H	18.6	19.4	19.0	19.8	20.2	19.3	20.1	19.7	20.5	20.9
6H	19.5	20.3	20.0	20.7	21.1	20.5	21.3	21.0	21.7	22.1
8H	19.9	20.6	20.4	21.0	21.4	21.0	21.7	21.5	22.1	22.5
12H	20.2	20.8	20.6	21.2	21.7	21.4	22.0	21.9	22.4	22.9
X=8H Y=4H	18.9	19.6	19.4	20.0	20.4	19.6	20.2	20.0	20.6	21.1
6H	20.0	20.5	20.5	21.0	21.5	20.9	21.4	21.4	21.9	22.4
8H	20.5	20.9	20.9	21.4	21.9	21.5	22.0	22.0	22.4	22.9
12H	20.8	21.2	21.3	21.7	22.2	21.9	22.4	22.4	22.8	23.4
X=12H Y=4H	19.0	19.6	19.4	20.0	20.5	19.6	20.2	20.0	20.6	21.1
6H	20.1	20.5	20.5	21.0	21.5	20.9	21.4	21.4	21.9	22.4
8H	20.6	21.0	21.1	21.5	22.0	21.6	22.0	22.1	22.5	23.0
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.3				
S=1.5H	+0.4/-0.7					+0.4/-0.6				
S=2.0H	+0.8/-0.9					+0.7/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4181lm ($8\log(F/F_0) = 5.0$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
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 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.00									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.63	0.73	0.79	0.84	0.90	0.95	0.98	1.02	1.04	
	0.30		0.56	0.66	0.72	0.77	0.84	0.89	0.93	0.98	1.01	
	0.20		0.51	0.60	0.67	0.72	0.80	0.85	0.89	0.94	0.98	
0.50	0.50	0.20	0.62	0.71	0.77	0.81	0.87	0.91	0.94	0.98	1.00	
	0.30		0.55	0.64	0.71	0.75	0.82	0.87	0.90	0.94	0.97	
	0.20		0.51	0.60	0.66	0.71	0.78	0.83	0.87	0.92	0.95	
0.30	0.50	0.20	0.60	0.69	0.74	0.78	0.84	0.88	0.90	0.94	0.96	
	0.30		0.55	0.63	0.69	0.74	0.80	0.84	0.87	0.91	0.94	
	0.20		0.50	0.59	0.65	0.70	0.76	0.81	0.84	0.89	0.92	
0.00	0.00	0.00	0.48	0.57	0.63	0.67	0.73	0.77	0.80	0.84	0.87	
Rating:36W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.00									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.90	0.74	0.63	0.56	0.44	0.37	0.32	0.25	0.20	
	0.30		0.75	0.63	0.55	0.49	0.40	0.34	0.30	0.23	0.19	
	0.20		0.64	0.55	0.49	0.44	0.37	0.31	0.28	0.22	0.19	
0.50	0.50	0.20	0.86	0.71	0.61	0.53	0.42	0.39	0.30	0.24	0.19	
	0.30		0.73	0.62	0.54	0.47	0.39	0.33	0.28	0.22	0.19	
	0.20		0.63	0.54	0.48	0.43	0.36	0.30	0.27	0.21	0.18	
0.30	0.50	0.20	0.84	0.68	0.58	0.51	0.40	0.34	0.29	0.22	0.18	
	0.30		0.71	0.60	0.52	0.46	0.37	0.31	0.27	0.21	0.18	
	0.20		0.63	0.54	0.47	0.42	0.35	0.29	0.26	0.20	0.17	
0.00	0.00	0.00	0.52	0.43	0.37	0.33	0.27	0.23	0.20	0.15	0.13	
Rating:36W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.00									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
0.50	0.50	0.20	0.15	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.15	0.16	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:36W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												